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Foreign Animal Disease Report

United States Department of Agriculture

Animal and Plant Health Inspection Service

Veterinary Services

Emergency Programs



Number 22-3 Winter 1994

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Field Investigations. During fiscal year 1994 (October 1, 1993–September 30, 1994), veterinary medical officers from the U.S. Department of Agriculture, Animal and Plant Health Inspection Service, Veterinary Services (USDA, APHIS, VS), and State departments of agriculture conducted 283 investigations of suspicious foreign animal diseases in the United States to eliminate the possibility that an exotic disease may have been introduced. These investigations included 93 (33 percent) for vesicular disease conditions, 58 (20 percent) for encephalitic disease, 37 (13 percent) for avian diseases in pet birds and poultry, 36 (13 percent) for hemorrhagic septicemia, 13 (5 percent) for mucosal disease, 11 (4 percent) for excessive acute death, 8 (3 percent) for mylasis/acariasis, 7 (2 percent) for pox/lumpy skin disease, 3 (1 percent) for respiratory disease, 3 (1 percent) for spontaneous abortion, and 14 (5 percent) for other miscellaneous disease conditions.

There were 79 investigations conducted in VS' Northern Region, 87 in the Southeastern Region, 61 in the Central Region, and 56 in the Western Region. All investigations were negative for foreign animal diseases or pests.



Foreign Animal Disease Update

This update consolidates into tables information from Office International des Epizooties (OIE) bulletins issued January through June 1994. Countries reporting disease outbreaks are listed below the appropriate disease heading (followed by the month/year of the report and total number of outbreaks reported for that time period). The notation "+" indicates that the presence of disease was reported without information on total number of outbreaks. Outbreak number followed by "+" indicates number of outbreaks as well as the presence of disease.

Foot-and-Mouth Disease

Virus Untyped Argentina (5/93-2/94) 87+ Bangladesh (7-9/93) + Bhutan (1,3&4/94) 3+ Brazil (11/93-2/94) 465 Chad (9-12/93) 10+ Egypt (1/94) 2 Ghana (1-9/93) 72 Hong Kong (11&12/93 & 2/94) 3 India (10/93-3/94) 870 Iran (7-12/93) 192 Laos (4-6&9/93) + Myanmar (12/93 & 2,4&5/94) 6 Nepal (7-9/93) 39 Pakistan (10-12/93 & 1&3/94) 5+ Tanzania (10&11/93) 3 Thailand (12/93-5/94) 22

Virus O Argentina (5/93-2/94) 52 Bahrain (12/93) + Brazil (11/93-2/94) 25 Colombia (12/93 & 1-4/94) 215 Egypt (11&12/93) 5 Ethiopia (2/94) + Ghana (4/94) + Hong Kong (11&12/93 & 2&3/94) + India (1-3/94) + Iran (1-4/94) 95 Iraq (2/94) + Israel (3-6/94) 15 Israel (Controlled Territories) (3-6/94) 14*Jordan (10/93 & 1/94) 2+ Kuwait (1,2&5/94) + Libya (1/94) + Malaysia (peninsula) (4-6/94) 3 Nepal (9/93 & 2&4/94) + Oman (11/93-3/94) 79 Pakistan (10-12/93) + Paraguay (11/93 & 1&3/94) 6 Saudi Arabia (1-4/94) + Sri Lanka (1-3&5/94) 4 Tajikistan (4/94) 4 Thailand (12/93 & 1-3&5/94) 21 Tunisia (5/94) 1

* Ibexes and gazelles in one outbreak.

Turkey (12/93-4/94) 140 Uganda (3-7/93) 2 Virus A
Argentina (5,8,10&11/93) 2
Brazil (11/93–2/94) 90
Burkina Faso (3/94) +
Colombia (12/93 & 1,2&4/94) 7
Ethiopia (2/94) +
India (1–3/94) +
Kenya (12/93 & 3/94) 2
Pakistan (10–12/93) +
Saudi Arabia (2&3/94) +
United Arab Emirates (12/93) 1

Virus C Argentina (5-12/93 & 4/94) 20 India (2&3/94) + Kenya (3/94) 1 Nepal (12/93 & 1/94) +

Virus SAT 2 Kenya (1,2&5/94) 3

Virus Asia 1 Cambodia (5/94) + India (2&3/94) + Saudi Arabia (3/94) + Thailand (12/93–5/94) 21

Vesicular Stomatitis

Virus Untyped Panama (1/94) 1 Virus Indiana Colombia (12/93–2/94) 10 Costa Rica (1/94) 1 El Salvador (1/94) 1 Honduras (1/94) 1 Panama (1&3/94) 3 Virus New Jersey
Belize (4/94) 12
Colombia (12/93–4/94) 120
Costa Rica (3&4/94) 4
El Salvador (11/93–2&4/94) 8
Guatemala (11&12/93) 4
Honduras (11/93 & 1/94) 7
Mexico (10/93–5/94) 59
Nicaragua (12/93 & 1/94) 3

Fowl Plague Bangladesh (7–9/93) + Laos (7–9/93) + Nepal (7–9/93) + Nigeria (9&10/93) + Rinderpest Ethiopia (11/93) 1 India (10/93-3/94) 22 Iran (3/94) 2 Sri Lanka (3/94) 1 Turkey (4/94) 1 Uganda (3/93) 1 Bluetongue India (10/93–1/94) 110 Namibia (5/94) 1 South Africa (1–6/94) 101 United States (10/93–6/94) +

Newcastle Disease

Virus Not Characterized Albania (9/93-4/94) 29+ Algeria (1&2/94) 1+ Argentina (5/93 & 2,4&6/94) + Bangladesh (7-9/93) + Brazil (11/93-1/94) 5 Cambodia (7-9/93) + Chad (9-12/93) + China (People's Republic) (7/93-3/94) 161 Cote-d'Ivoire (10/93-3/94) + Egypt (2&3/94) 4 Ghana (1-9/93 & 1&2/94) 132 Guinea (11/93-5/94) + Hong Kong (2&4/94) 2 India (10/93-3/94) 287 Iran (7/93-4/94) 413 Italy (3/93 & 4-6/94) 6 Jordan (10/93-4/94) 69+ Laos (7-9/93) +

Madagascar (10/93-3/94) 16 Malaysia (peninsula) (2-5/94) 4 Mexico (11/93) 1 Mozambique (1-3/94) + Myanmar (1-5/94) 9 Nigeria (9&10/93) 3 Philippines (1/94) + Senegal (1-3/94) + South Africa (12/93 & 1&3-6/94) + Swaziland (1-5/94) 11+ Syria (11/93 & 3/94) 77 Tanzania (10-12/93) 27 Tunisia (11/93-1/94) 63 Turkey (12/93-4/94) 15 Uganda (3-12/93) + United Arab Emirates (10/93) 1 Vietnam (7-9/93) + Zambia (12/93-2/94) +

Velogenic Virus Belgium (12/93 & 6/94) 4* Botswana (11/93-5/94) + Germany (4-6,8-10&12/93 & 3-5/94) 189 Kenya (12/93 & 1,3&4/94) 5 Korea (Republic) (12/93 & 2,4&5/94) 8 Malaysia (peninsula) (5/94) 1 Mexico (11/93) 1 Namibia (4/94) 1 Nepal (7-9/93) 3+ Netherlands (3&4/94) 4 Russia (7&8/93) 2 South Africa (12/92 & 1-6/94) 46 Spain (12/93) 1 Sri Lanka (10/93-5/94) 90 Sudan (3/94) 2 Switzerland (3/94) 1 Tunisia (2-5/94) 22 Zimbabwe (12/93 & 1&6/94) 3

* In quarantined birds.

Hog Cholera

Argentina (5-12/93) + Belgium (12/93-6/94) 47 Brazil (11/93-2/94) 54 Bulgaria (1,3&4/94) 6 Cambodia (7-9/93) + Chile (12/93-6/94) 13+ China (People's Republic) (7/93-3/94) 162 Colombia (12/93-4/94) 22 Czech Republic (12/93 & 1,3&5/94) 6* Estonia (1/94) 1 Former Yugoslavian Republic (Serbia and Montenegro) (5/94) 4 Germany (12/93-5/94) 73 Hong Kong (11&12/93 & 1&4/94) 5 India (10/93-3/94) 163 Italy (1,2&4-6/94) 13 Korea (Republic) (12/93-5/94) 6

Laos (4-9/93) + Macedonia (4/93) 1 Madagascar (11/93 & 2&3/94) 4 Mauritius (5/93-3/94) + Mexico (11/93 & 3-5/94) 7 Nepal (7-9/93) 2+ Philippines (10&11/93 & 1-3/94) + Poland (4/94) 4 Russia (10/93 & 1-4/94) 23 Slovak Republic (12/93-4/94) 23 Sri Lanka (3/94) 1 Taipei China (5/94) 1 Taiwan (1&2/94) 2 Thailand (1&3-5/94) 4 Ukraine (1/94) 2 Vietnam (7-9/93) + Yugoslavia (3&4/94) 6

* Includes wild boars.

Sheep and Goat Pox Algeria (12/93-6/94) 452 Bangladesh (7-9/93) + China (People's Republic) (7-10/93 & 2&3/94) 10 Cote-d'Ivoire (1-3/94) + Guinea (2/94) + India (10/93-3/94) 54 Iran (7/93-4/94) 204+ Jordan (10-12/93) 4 Mali (8/93) 1 Morocco (1,2,5&6/94) 7 Oman (11/93-3/94) 12 Pakistan (10-12/93) + Senegal (6&8-10/93 & 1-3/94) 16+ Syria (11/93 & 1-3/94) 46 Tunisia (11/93-5/94) 172 Turkey (12/93-4/94) 146

Peste des Petits Ruminants

Cote-d'Ivoire (10/93 & 1–3&5/94) 2+ Ghana (1–6&8/93 & 1&2/94) 47 Guinea (11/93–5/94) + Israel (Controlled Territories) (2/94) 1 Jordan (10&11/93) 2 Nigeria (9&10/93 & 1&2/94) 14 Oman (11/93–3/94) 55 Senegal (6/93–3/94) 95+ African Swine Fever Angola (1/94) 1 Italy (1–6/94) 80* Mozambique (1–3/94) 1+ Senegal (1&2/94) + Spain (1&2/94) 11 Uganda (3–5&12/93) 2

* Includes wild boars.

Swine Vesicular Disease Italy (1–6/94) 24 Netherlands (2/94) 3

Rift Valley Fever Mozambique (1-3/94) + African Horse Sickness Mozambique (1–3/94) + Namibia (5/94) 1 Senegal (8/93–2/94) 29+ South Africa (12/93–4/94) 9 Zimbabwe (3&4/94) 3 Contagious Bovine Pleuropneumonia
Angola (1/94) 7
Chad (9-12/93) +
Cote-d'Ivoire (10&11/93 & 1-3&5/94) 5+
Ghana (2-6/93 & 1&2/94) 4+
Guinea (11/93-5/94) +
Italy (1/94) +
Kenya (1,3&4/94) 3
Mali (7/93-1/94) 11
Namibia (2-4/94) 6
Nigeria (9&10/93 & 1-3/94) 11
Spain (3&4/94) 3
Uganda (3-6/93) 2

Lumpy Skin Disease
Angola (1/94) 2
Botswana (1-5/94) +
Egypt (4/94) 1
Ghana (2-8/93) 36+
Madagascar (10/93-3/94) 41
Mali (1/94) 1
Namibia (1-4&6/94) 12
Nigeria (9&10/93) +
Senegal (7,10&11/93) 5
South Africa (12/93-6/94) 121
Swaziland (1-5/94) +
Uganda (8&12/93) 2
Zambia (12/93-2/94) +
Zimbabwe (1-6/94) 45

(Dr. William White, International Services [IS], APHIS, USDA, Hyattsville, MD 20782, 301-436-8892)

Screwworm Update

Mexico. Mexico remained officially free of screwworms, although one case that had been collected several years prior to submission was reported near the sterile-fly production plant in Tuxtla. The offices in Mexico City have been relocated to Tuxtla Gutierrez.

Belize and Guatemala. Both countries were officially declared free of screwworms in 1994. Responsibility for surveillance was transferred to the respective countries.

El Salvador. Release of sterile flies ceased in June 1994; surveillance and quarantine continue. Sterile flies previously scheduled for release in El Salvador are now being shipped to Nicaragua.

Honduras. More than half the country is free from screwworms. The only areas of persistent infestations are adjacent to Nicaragua. Prophylactic treatment continues over those critical areas of Honduras.

Costa Rica. An agreement was signed early in 1994 to initiate a sterile-fly release program. Operations are planned to start in 1995.

Panama. An agreement was signed February 11, 1994, to allow for the construction of a sterile-fly rearing facility in Panama. Such a facility is needed in Panama so that flies will be available to maintain the barrier in the Darien Gap when the screwworm has been eradicated in all areas north of the Darien.

(Dr. Christopher Hoffman, IS, APHIS, USDA, Hyattsville, MD 20782, 301-436-8892)

Bovine Spongiform Encephalopathy Update

Surveillance of Domestic Animals in the United States. From the onset of the Bovine Spongiform Encephalopathy (BSE) Surveillance Program in May 1990 through October 1994, 1,927 brain specimens were submitted for examination to the USDA, APHIS, VS, National Veterinary Services Laboratories (NVSL), and other laboratories. All of the samples were negative for histopathologic evidence of BSE.

Surveillance of Cattle Imported From the United Kingdom. As of October 13, 1994, of the 499 cattle imported into the United States from the United Kingdom

between 1981 and July 1989, 136 animals are known to be alive, 290 animals are known to be dead, 8 animals have been exported, and tracebacks are ongoing for 65 animals.

(Dr. Sara Kaman, Emergency Programs, VS, APHIS, USDA, Hyattsville, MD 20782, 301-436-8073)

In Europe. Between June 3 and September 2, 1994, Great Britain had 5,601 newly confirmed cases of BSE with 649 more herds affected. About 52.1 percent (up from 51.2 in the previous quarter) of the dairy herds and 13.7 percent (up from 13.3) of the beef suckler herds in Great Britain have been affected (table 1). However, the incidence of newly identified cases of BSE in Great Britain continues to decrease (fig. 1).

Table 1—Descriptive epidemiologic statistics for BSE in Great Britain* as of September 2, 1994

Total number of confirmed cases	134,202
Total number of affected herds	31,269
Percentage of dairy herds affected	52.1
Percentage of beef suckler herds affected	13.7

^{*} England, Scotland, and Wales.

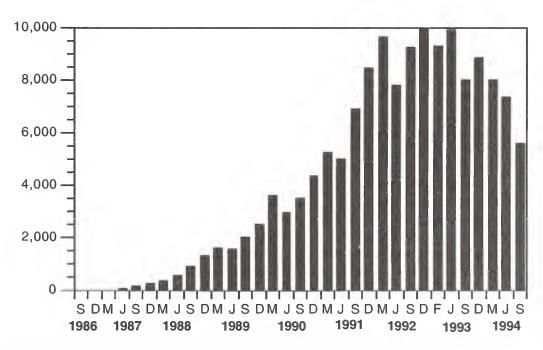


Figure 1—Number of new cases of BSE in Great Britain, September 1986—September 1994 (F=February, M=March, J=June, S=September, D=December)

In the last 3 months, 68 additional confirmed cases of BSE have been reported from Northern Ireland, while the Republic of Ireland and Switzerland have had 3 and 20 cases, respectively. Germany identified two additional cases in imported animals. Portugal recently reported identification of a total of 10 cases, some in native cattle (table 2).

Table 2—Other countries affected by BSE

Country	Imported cases	Native cattle		Date of last report
			Cases	
Canada	Yes	No	1	15 Dec 93
Denmark	Yes	No	1	10 Aug 92
Falkland Islands	Yes	No	1	4 Sep 92
France	No	Yes	9	1 Sep 94
Germany	Yes	No	4	1 Sep 94
Northern Ireland	Yes	Yes	1,385	16 Sep 94
Oman	Yes	No	2	31 Jul 92
Portugal	Yes	Yes	10	1 Sep 94
Republic of Ireland	Yes	Yes	93	1 Sep 94
Switzerland	No	Yes	98	1 Sep 94

[Source: Dx Monitor, Animal Health Report, Fall 1994, VS, APHIS, USDA, 555 South Howes, Suite 200, Fort Collins, CO 80521]

Food and Drug Administration Proposes Prohibiting Sheep and Goat Offal in Ruminant Feed. In the August 29, 1994, Federal Register, the U.S. Department of Health and Human Services' Food and Drug Administration (FDA) proposed a rule to prohibit specified offal from adult (more than 12 months of age) sheep and goats for use in ruminant feed. The proposal defines "specified offal" as any tissue from the brain, spinal cord, spleen, thymus, tonsil, lymph nodes, or intestines (duodenum to anus, inclusive) of sheep or goats, or any processed product that is reasonably expected to contain specified offal. Products likely to contain specified offal include dried meat, meat meal tankage, animal digest, bone ash, bone charcoal, spent bone charcoal, cooked bonemeal, and bone phosphate.

FDA is proposing this action because the specified offal may contain the agent that causes scrapie, a transmissible spongiform encephalopathy (TSE) of sheep and goats. In the United Kingdom, scrapie has been epidemiologically associated with the occurrence of BSE. Because FDA cannot positively rule out a direct association between scrapie, BSE, and human TSE's, FDA is proposing this action to protect the health of people and animals.

Copies of the proposal are available from the Communications and Education Branch, HFV-12, Center for Veterinary Medicine, FDA, 7500 Standish Place, Rockville, MD 20855.

Equine Disease Outbreak in Brisbane, Australia

An outbreak of an equine disease occurred in thoroughbred horses on two premises in the Brisbane area of Queensland, Australia. In the period September 7–23, 1994, 14 horses (13 on 1 premises and 1 on another premises) were euthanized after

becoming seriously ill. Clinical signs included high temperature, ataxia, severe depression, and bloody discharge from the nose and mouth. Severe pulmonary edema was the most consistent postmortem finding.

In addition, the trainer in charge of some of the diseased horses became ill and subsequently died of a similar respiratory condition. The trainer was in direct contact with the horses; at the time when the animals were clinically ill, the trainer apparently force-fed the animals, introducing his hand and arm, on which there were abrasions, down the horses' throats. A stable hand also became ill but has since fully recovered.

Australian animal and public health officials conducted an extensive investigation of the outbreak. Laboratory tests were negative for African horse sickness, equine influenza, equine herpes, and various toxins. A hantavirus was also ruled out. At one time during the investigation, hantavirus was strongly suspected because one of the affected farms had a high rat infestation with droppings and urine present in the horse feed. The affected trainer was also reported to have often tasted the horse feed during mixing. The trainer's clinical signs suggested Legionnaire's disease, but this disease was also ruled out.

The Commonwealth Scientific and Industry Research Organization's Australian Animal Health Laboratory (AAHL), Geelong, Victoria, isolated a previously unidentified paramyxovirus of the genus Morbillivirus. As of October 13, 1994, the virus had not been fully characterized. Antibodies to the virus were detected in the deceased trainer, the recovered stable hand, and a private veterinary practitioner in attendance during early stages of the disease outbreak who remained clinically unaffected. AAHL reproduced the disease in horses through inoculation with tissue homogenate as well as cell culture virus.

Preliminary epidemiology suggests that the virus does not spread easily among horses, as evidenced by its limited spread to only two premises. However, five premises were placed under quarantine in the Brisbane area due to movement of horses from the affected premises. Restrictions were also instituted prohibiting movement of horses, donkeys, and mules in a 5-km zone around the quarantined premises. Horse movement, race meetings, and other equestrian activities are ongoing outside of the restricted areas.

The virus is not considered highly infectious to man, and human health officials suggest that persons handling sick horses need only exercise basic hygienic precautions.

As of September 29, 1994, all of the sick horses appeared to have recovered. Serologic testing is being used on the quarantined premises and in surrounding areas in order to monitor horses, other directly associated species (e.g., rats), veterinarians, and other persons who have been in close contact with the affected animals.

The Australian Government is providing certification stating that exported horses have not been within the quarantined zone for 30 days prior to export, nor on the infected properties within 60 days prior to export. USDA implemented a temporary requirement for statement of certification that imported horses have not resided in the State of Queensland for a 60-day period immediately prior to export.

(Dr. Sara Kaman, Emergency Programs, VS, APHIS, USDA, Hyattsville, MD 20872, 301-436-8073; and Dr. Timothy Cordes, Sheep, Goat, Equine, Poultry, and Miscellaneous Diseases, VS, APHIS, USDA, Hyattsville, MD 20782, 301-436-6954)



On August 1, 1994, Greek Ministry of Agriculture officials reported an outbreak of foot-and-mouth-disease (FMD) in the Xanthi prefecture. Diagnosis was confirmed July 31, 1994, by the OIE World Reference Laboratory for FMD at Pirbright Laboratory in the United Kingdom. After cell culture passage, FMD virus type O was confirmed by enzyme-linked immunosorbent assay (ELISA). Nucleotide sequence analysis showed a close antigenic relationship with other type O strains in the region, especially in the Middle East.

Since FMD was first reported in Xanthi, 90 farms in 5 prefectures have had clinical cases. No further outbreaks have been reported since September 16, 1994. The virus is reportedly a mild strain. Control measures instituted by Greek veterinary authorities include depopulation, total or partial quarantine of affected prefectures, and a national ban on the movement of FMD-susceptible species. Animals that have been depopulated reportedly include 1,600 cattle, 8,500 sheep and goats, and 80 pigs. A nationwide epidemiologic surveillance program with clinical examinations, serologic testing, and traceback of animal movements has been instituted.

On August 8, 1994, the European Union (EUN), through its Commission of the European Communities, placed a ban on the entry of live animals susceptible to FMD, fresh meat, meat products, milk and milk products, semen, embryos, hides and skins from Greece. Those products subjected to appropriate heat or chemical treatment, or produced before June 1, 1994, are still eligible for export from Greece. The ban was extended again on August 22 and September 9, 1994.

Greek farmers have been fully compensated for their losses, with 70 percent of the funds paid by EUN and 30 percent paid by the Greek Government. As of August 17, 1994, Greek agricultural officials estimated damages to be equivalent to \$2.8 million. Greece does not export meat and live animals; however, it has a growing dairy products market in Eastern Europe and the Balkans.

The five prefectures with clinical disease include Lesbos Island, Xanthi, Rodopi, Chalkidiki, and Evros (fig. 2). In addition, serologic screening detected positive farms with no clinical cases reported in the prefectures of Kavala, Kilkis, Kastoria, and Attiki. These farms have been placed under official veterinary control.

The epizootic is believed to have begun with the illegal movement of sheep from Turkey to Lesbos Island, 4 km from Turkey. Movement may have occurred to increase flock numbers in response to subsidies paid by EUN at the end of May 1994. Reportedly, vesicles on sheep and cattle were observed by owners on Lesbos, and samples were sent to the national veterinary laboratory in Athens for diagnosis. Samples were tested for bluetongue but not for FMD. After 14 shipments of animals from Lesbos to mainland Greece, an astute veterinarian in Xanthi submitted samples to Pirbright Laboratory after observing vesicular lesions in his patients.

(Dr. William White, IS, APHIS, USDA, Hyattsville, MD) 20783, 301-436-8892)

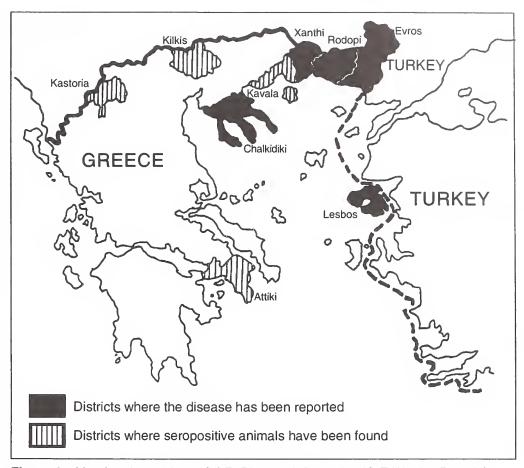


Figure 2—Map is adapted from *O.I.E. Disease Information* (OIE Weekly Bulletin), 30 September 1994, Vol. 7–No. 37.

In May and June 1994, Mexican animal health officials submitted isolates of avian influenza virus (AIV) type A to NVSL for characterization. The samples were tested for subtype identity and pathogenicity in susceptible chickens. In addition, the St. Jude Children's Research Hospital, Memphis, TN, determined the amino acid sequence at the hemagglutinin cleavage site of six of the isolates. Results showed that all AIV isolates were subtype H5N2. None of the isolates were pathogenic to chickens inoculated intravenously. The cleavage site of the six isolates was also consistent with that of a nonpathogenic H5N2.

Mexican animal health officials reported that this virus had been isolated from commercial chickens in 11 States in central Mexico. In some flocks, respiratory disease was observed, and the mortality was up to 18 percent; in other infected flocks, there were no clinical signs. Officials believe that secondary bacterial infections were the cause of the high mortality.

Mexican animal health officials have put restrictions on the movement of poultry and poultry products in the affected areas and have initiated a surveillance program. There has been no virus isolation reported from the Mexican States adjoining the United States.

(Dr. Brundaban Panigrahy, Diagnostic Virology Laboratory) NVSL, VS (APHIS, USDA, Ames, IA 50010, 515-239-8551)

Isolation of Avian Influenza Virus in Mexico As of mid-January 1995, USDA, APHIS, headquarters will move to new facilities. Questions about the Foreign Animal Disease Report may be sent after January 17, 1995, to:

Dr. Sara Kaman, Editor USDA, APHIS, VS, Emergency Programs 4700 River Road Riverdale, MD 20737

Readers wishing to contact VS or other APHIS officials previously based in Hyattsville may do so by dialing (301) 734- plus the original last four digits of their telephone number. Emergency Programs' new telephone number will be (301) 734-8073.

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